AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act, as amended, (33 U.S.C. §§1251 et seq.; the "CWA"),

New Hampshire Department of Resources and Economic Development

is authorized to discharge from the Wastewater Treatment Plant located at

Wallis Sands State Park Ocean Boulevard (Route 1A) Rye, New Hampshire 03870

to receiving water named

Atlantic Ocean with the Hydrologic Basin Code 01060003

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on May 1, 2002.

This permit and the authorization to discharge expire at midnight, five (5) years from the effective date.

This permit supersedes the permit issued on February 12, 1996.

This permit consists of **8** pages in Part I including effluent limitations, monitoring requirements, etc., **Sludge Compliance Guidance** dated November 4, 1999 (**72** pages), and **35** pages in Part II including General Conditions and Definitions.

Signed this 19th day of February, 2002

/Signature on File/ Linda M. Murphy, Director Office of Ecosystem Protection U.S. Environmental Protection Agency EPA-New England Boston, Massachusetts

PART I.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning **ON MAY 1**ST **and LASTING THROUGH TO OCTOBER 31**ST **OF EACH YEAR**, the permittee is authorized to discharge from outfall serial number 001 treated domestic (sanitary) wastewater effluent into the Atlantic Ocean. Such discharges shall be limited and monitored by the permittee as specified below. Samples taken in compliance with the monitoring requirements specified below shall be taken at a location that provides a representative analysis of the effluent.

Effluent Characteristic	<u>Discharge Limitations</u>					Monitoring Requirements		
	Average Monthly	Average <u>Weekly</u> (lbs/day)	Maximum <u>Daily</u>	Average Monthly	Average <u>Weekly</u>	Maximum <u>Daily</u>	Measurement Frequency	Sample <u>Type</u>
Flow; MGD				Report		Report	Continuous	Recorder ¹
BOD_5	2.5	3.8	4.2	30 mg/l	45 mg/l	50 mg/l	2/Month ²	Grab
TSS	2.5	3.8	4.2	30 mg/l	45 mg/l	50 mg/l	2/Month ²	Grab
pH Range ³		6.5 to	8.0 Standard	Units (See PART I.E.1.a.)			3/Week	Grab
Fecal Coliform Bacteria ³ ; Colonies per 100 ml				14 ⁴		Report ⁵	5/Week	Grab
Enterococci Bacteria ^{3,6} ; Colonies per 100 ml				35		104	1/Day	Grab

See page 3 for explanation of superscripts

EXPLANATION OF SUPERSCRIPTS APPLICABLE TO PART I.A.1. on page 2

- (1) The effluent flow shall be continuously measured and recorded using a flow meter and totalizer.
- (2) The influent concentrations of both BOB₅ and TSS shall be monitored twice per month (2/Month) using a Grab sample and the results reported as average monthly values.
- (3) State Certification Requirement.
- (4) Compliance with the "average monthly" limit for Fecal Coliform shall be determined by calculating the geometric mean. Not more than 10 percent of the collected samples shall exceed a Most Probable Number (MPN) of 43 per 100 milliliters for a 5-tube decimal dilution test. Fecal Coliform shall be tested using test method 9222 D or 9221 C E found in <u>Standard Methods for the Examination of Water and Wastewater, 18th or subsequent Edition(s)</u>, as approved in 40 Code of Federal Regulations (CFR) Part 136. Furthermore, all Fecal Coliform data collected must be submitted with the monthly Discharge Monitoring Reports.
- (5) The permittee is required to report two (2) statistics each month. One is the maximum daily Fecal Coliform value expressed in terms of "Colonies per 100 ml", and the other is the "percentage" of collected samples that exceeds a MPN of 43 per 100 milliliters for the 5-tube decimal dilution test referenced in superscript (4) immediately above. The later statistic will be used to judge compliance with that part of the limit that reads "Not more than 10 percent of the collected samples shall exceed a MPN of 43 per 100 milliliters for a 5-tube decimal dilution test." referenced in superscript (4) immediately above.
- (6) Enterococci shall be tested using test method ASTM Enterococci Method D6503-99 using IDEXX EnterolertTM where ASTM stands for American Society for Testing and Materials.

Alternate analytical methods to ASTM Enterococci Method D6503-99 using IDEXX EnterolertTM may be approved by EPA-New England if requested in writing either by the permittee or by New Hampshire Department of Environmental Services, Water Division (NHDES-WD). Such a request should include the technical justification(s) as the basis for requesting this change. Such a request will be considered a minor modification to the permit. In addition, should a method for Enterococci be approved in 40 CFR Part 136, the permittee shall change to that method upon written notice from EPA-New England. Until written notice is received by certified mail from the EPA-New England indicating alternative method(s) have been approved including any approved in 40 CFR Part 136, the permittee is required to test for Enterococci as required in the respective permit.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (Continued)

- 2. The discharge shall not cause a violation of the water quality standards of the receiving water.
- 3. The discharge shall be adequately treated to insure that the surface water remains free from pollutants in concentrations or combinations that settle to form harmful deposits, float as foam, debris, scum or other visible pollutants. It shall be adequately treated to insure that the surface waters remain free from pollutants which produce odor, color, taste or turbidity in the receiving waters which is not naturally occurring and would render it unsuitable for its designated uses.
- 4. The permittee's treatment facility shall maintain a minimum of 85 percent removal for both BOD₅ and TSS. The percent removal shall be based on a comparison of average monthly influent versus effluent concentrations.
- 5. When the effluent discharged for a period of 90 consecutive days exceeds 80 percent of the 0.01 Million Gallons per Day (MGD) design flow or 0.008 MGD, the permittee shall submit to the permitting authorities a projection of loadings up to the time when the design capacity of the treatment facility will be reached, and a program for maintaining satisfactory treatment levels consistent with approved water quality management plans. Before the design flow will be reached, or whenever treatment necessary to achieve permit limits cannot be assured, the permittee may be required to submit plans for facility improvements.
- 6. Any introduction of pollutants into the treatment works from either a non-domestic source (user) or a primary industrial category (See 40 CFR Part 122, Appendix A as amended) is prohibited. The term (user) is defined in 40 CFR Section 403.3.
- 7. All Publicly Owned Treatment Works (POTWs) must provide adequate notice to both EPA-New England and the NHDES-WD of the following:
 - a. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
 - b. For purposes of this paragraph, adequate notice shall include information on:
 - (1) the quantity and quality of effluent introduced into the POTW; and
 - (2) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
- 8. The permittee shall not discharge into the receiving water any pollutant or combination of pollutants in toxic amounts.

B. SLUDGE CONDITIONS

1. The permittee shall comply with all existing federal & state laws and regulations that apply to sewage sludge use and disposal practices and with the CWA Section 405(d) technical standards.

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- 2. The permittee shall comply with the more stringent of either the state (Env-Ws 800) or federal (40 CFR Part 503) requirements.
- 3. The requirements and technical standards of 40 CFR Part 503 apply to facilities which perform one or more of the following use or disposal practices.
 - a. Land application the use of sewage sludge to condition or fertilize the soil.
 - b. Surface disposal the placement of sewage sludge in a sludge only landfill.
 - c. Placement of sludge in a municipal solid waste landfill (See 40 CFR Section 503.4).
 - d. Sewage sludge incineration in a sludge only incinerator.
- 4. The 40 CFR Part 503 conditions do not apply to facilities which place sludge within a municipal solid waste landfill. These conditions do not apply to facilities which do not dispose of sewage sludge during the life of the permit, but rather treat the sludge (lagoons-reed beds), or are otherwise excluded under 40 CFR Section 503.6.
- 5. The permittee shall use and comply with the attached Sludge Compliance Guidance document to determine appropriate conditions. Appropriate conditions contain the following elements.

General requirements Pollutant limitations

Operational Standards (pathogen reduction requirements and vector attraction reduction requirements)

Management practices Record keeping Monitoring Reporting

Depending upon the quality of material produced by a facility all conditions may not apply to the facility.

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6. The permittee shall monitor the pollutant concentrations, pathogen reduction and vector attraction reduction for the permittee's chosen sewage sludge use or disposal practices at the following frequency. This frequency is based upon the volume of sewage sludge generated at the facility in dry metric tons per year.

less than 290 1/Year 290 to less than 1,500 1/Quarter 1,500 to less than 15,000 6/Year 15,000 plus 1/Month

- 7. The permittee shall sample the sewage sludge using the procedures detailed in 40 CFR Section 503.8.
- 8. The permittee shall submit an annual report containing the information specified in the attached Sludge Compliance Guidance document. Reports are **due annually by**February 19th. Reports shall be submitted to both addresses (EPA-New England and NHDES-WD) contained in the reporting section of the permit.

C. SPECIAL CONDITION

pH Limit Adjustment

The permittee may submit a written request to the EPA-New England requesting a change in the permitted pH limit range to be not less restrictive than 6.0 to 9.0 Standard Units found in the applicable National Effluent Limitation Guideline (Secondary Treatment Regulations in 40 CFR Part 133) for this facility. The permittee's written request must include the State's approval letter containing an original signature (no copies). The State's letter shall state that the permittee has demonstrated to the State's satisfaction that as long as discharges to the receiving water from a specific outfall are within a specific numeric pH range the naturally occurring receiving water pH will be unaltered. That letter must specify for each outfall the associated numeric pH limit range. Until written notice is received by certified mail from the EPA-New England indicating the pH limit range has been changed, the permittee is required to meet the permitted pH limit range in the respective permit.

D. MONITORING AND REPORTING CONDITIONS

Monitoring results shall be summarized for each calendar month and reported on separate Discharge Monitoring Report Form(s) (DMRs) postmarked no later than the 15th day of the month following the completed reporting period.

Signed and Dated original DMRs and <u>all</u> other reports required herein, shall be submitted to the Director at the following address:

U.S. Environmental Protection Agency Water Technical Unit (SEW) P.O. Box 8127 Boston, Massachusetts 02114-8127

Duplicate signed copies of all reports required herein shall be submitted to the State at:

New Hampshire Department of Environmental Services
Water Division
Wastewater Engineering Bureau
6 Hazen Drive, P.O. Box 95
Concord, New Hampshire 03302-0095

E. STATE PERMIT CONDITIONS

- 1. The permittee shall comply with the following conditions which are included as State Certification requirements.
 - a. The pH range of 6.5-8.0 Standard Units (S.U.) must be achieved in the final effluent unless the permittee can demonstrate to NHDES-WD: (1) that the range should be widened due to naturally occurring conditions in the receiving water or (2) that the naturally occurring receiving water pH is not significantly altered by the permittee's discharge. The scope of any demonstration project must receive prior approval from NHDES-WD. In no case, shall the above procedure result in pH limits outside of the range of 6.0 to 9.0 S.U., which is the federal effluent limitation guideline regulation for pH for secondary treatment and is found in 40 CFR §133.102(c).
 - b. The permittee shall not at any time, either alone or in conjunction with any person or persons, cause directly or indirectly the discharge of waste into the said receiving water unless it has been treated in such a manner as will not lower the legislated water quality classification or interfere with the uses assigned to said water by the New Hampshire Legislature (RSA 485-A:12).

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- 2. This NPDES Discharge Permit is issued by the EPA-New England under Federal and State law. Upon final issuance by the EPA-New England, the NHDES-WD may adopt this permit, including all terms and conditions, as a State permit pursuant to RSA 485-A:13.
 - Each Agency shall have the independent right to enforce the terms and conditions of this Permit. Any modification, suspension or revocation of this Permit shall be effective only with respect to the Agency taking such action, and shall not affect the validity or status of the Permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation.
- 3. In the event of a discharge of raw sewage or a bypass of the disinfection system, the permittee shall provide immediate notification to the New Hampshire Department of Environmental Services, Watershed Management Bureau at Pager Number 603/771-9826. This Pager Number is monitored 24-Hours a Day Seven (7) Days a Week.